

**A New species of *Actaletes* from México  
(Collembola: Actaletidae)**

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*Abstract.*—*Actaletes nemyops* new species is described from Sonora, México. Males possess differentiated setae on the third and fourth antennal segments but lack the metatibiotarsal spur present in other New World species.

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Thanks to the kindness of Drs. Kenneth Christiansen and Peter F. Bellinger I was able to study several specimens of *Actaletes* from México which represent the new species described below. Only four species of *Actaletes* have been described so far, one from Europe (France) and three from America (Jamaica, Venezuela and México). All species are strictly littoral and rarely seen or collected.

The species name, *nemyops*, refers to the absence of a metatibiotarsal spur in the male.

***Actaletes nemyops* NEW SPECIES**

Habitus typical of genus. Length to 1.24mm ( $\bar{x}$  for females 1.03mm; only male 0.83). Head, body and appendages pale brown. Proportions of antennal segments 1–4 as 10:27:22:20. Apex of fourth antennal segment (Ant. 4) with a pin seta on a papilla (Fig. 3), 3 apically curved setae, 5–6 stout setae and several blunt sensillae—one being much larger than the others (Figs. 13–14). Ant. 4 of male with a large seta expanded as a lamella (Fig. 12). Ant. 3 sense organ of 2 mushroomlike setae on a shallow depression (Fig. 1); a sensillar triangle is opposed to this organ (Fig. 2). Medial region of Ant. 3 with a prominent spinelike seta (Fig. 5). Apex of Ant. 2 with a short blunt spine similar to that on *A. venezuelensis*. Eyes 8 + 8; 6–8 hairs within eye patch (Fig. 4). Postantennal organ 1.1× wider than the lower innermost eye (Fig. 9). Right mandible with 6 teeth (Fig. 18), left mandible with 4 teeth (Fig. 17). Terminal seta of outer maxillary lobe somewhat smaller than basal seta. Labial triangle with 4 setae; 10–11 setae in an irregular row almost perpendicular to the cephalic groove (Fig. 16). Male without profemoral or protibiotarsal spinelike setae; metatibiotarsal spur absent (Fig. 10). Tenent hair lamellar. Ungues with a small tunica (Fig. 6). One small tooth on unguis II, without teeth on unguis I and III. Inner margin of unguiculi I and II concave (Figs. 6–7), inner margin of unguiculus III convex (Fig. 8). Fourth abdominal segment dorsally 2× longer than segments 1–3 combined; with 4 pairs of bothriotricha (Fig. 15). Tergal sutures almost reaching bothriotrix II. Colophore with 3 + 3 setae. Tenaculum with 5 setae, upper pair smaller than the others. Ratio length dens: mucro 70:10 in female and 54:10 in male. Distribution of dental spines as in Figure 19. Inner margin of dens with 4–5 long setae. Mucro tridentate (Fig. 20), basal and subapical teeth close together but not facing each other. Mucronal seta present. Male genital plate with 2 differentiated setae (Fig. 11). Female genital plate without such setae.



Figs. 1-11. *Actaletes nemyops* new species. 1. Ant. 3 sense organ. 2. Ant. 3 apical triangle of blunt setae. 3. Apex of Ant. 4. 4. Left eye patch. 5. Ant. 3, ventral view. 6. Mesothoracic claw. 7. Prothoracic unguiculus. 8. Metathoracic unguiculus. 9. Lower innermost eye and postantennal organ. 10. Dorsal view of metatibiotarsus. 11. Differentiated seta of male genital plate.



Figs. 12–20. *Actaletes nemyops* new species. 12. Modified setae on mid-ventral region of Ant. 4. 13. Normal blunt seta of Ant. 4. 14. Large blunt seta of Ant. 4. 15. Tergum of fourth antennal segment showing bothriotracheal pattern and tergal suture. 16. Cephalic groove and seta behind labial triangle. 17. Apex of left mandible. 18. Apex of right mandible. 19. Arrangement of dental spines, thickest circles represent spines seen directly from above, other circles represent smooth setae. 20. Mucro and insertion of mucronal seta.

*Diagnosis.*—*Actaletes nemyops* new species can be distinguished from *A. venezuelensis* Najt y Rapoport 1972 (Venezuela) by the color of the body, antennal chaetotaxy, absence of teeth on unguis I, form of third unguiculus and by the distance between the basal and subapical mucronal teeth. *Actaletes nemyops* is easily separated from *A. calcarius* Bellinger 1962 (Jamaica) and *A. boneti* Parisi 1972 (México) because males of the latter species possess a conspicuous metatibiotarsal spur. *Actaletes neptuni* Giard 1889 (France) can be distinguished from *A. nemyops* by the labial chaetotaxy, form of the third unguiculus, relative position of basal and subapical mucronal teeth and by the presence of sexual dimorphism in *A. nemyops*.

*Material examined.*—México, Sonora, on surface of tide pool, 20.II.1974. V. Roth and W. Brown. Holotype male and 4 paratypes on slides, one paratype in alcohol. The specimen in alcohol remains in my collection, the holotype and paratypes are deposited in the Museum of Comparative Zoology, Cambridge, Massachusetts.

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